Nat History vol 2.

A

Sketch of a Plan,

FOR THE

INVESTIGATION OF THE TRUE PRINCIPLES

OF

RATIONAL, PRACTICAL

AGRICULTURE.

LONDON.

PRINTED in the YEAR MDCCLXXXV.

BRAZIL
BRASIL

A

Sketch of the Plan, &c.

AGRICULTURE is a ſtudy that extends its benefits to all ranks of people, and is equally conducive to health, profit, and entertainment. It is no inconſiderable inducement to the proſecution of this ſtudy to know, that there are but few eſtates which do not produce materials for their own improvement. Thoſe in the remoteſt parts of the country are, probably, neareſt the richeſt manure. In this branch of knowledge, as in the dawn of every ſcience, the firſt experiments made in aid of it, are generally rude, ambiguous, and indeciſive. Hence its votaries are liable to be involved in greater expence and trouble in inveſtigating its principles than are neceſſary; when ſimpler methods of tryal and reaſoning might do the buſineſs with greater eaſe and certainty. Even Boyle and Newton, thoſe great and venerable names, who will ever ſtand foremoſt in the liſt of philoſophic worthies, muſt yield the palm in this reſpect to more modern diſcoverers, who, with the advantage of ſtanding on their ſhoulders,

have a clearer and more extenſive view of nature before them. I am here ſpeaking of the ſublimer and more abſtruſe parts of philoſophy, in which experiments require much time, labour, and ingenuity, and not of thoſe inferior arts, which, with far leſs *eclat*, are perhaps of much more real utility and deſerve more highly the praiſe and encouragement of the public. The ingenious Franklin may aſtoniſh admiring crouds with ſtealing fire from heaven, and ſo may Breſlaw (pardon the compariſon) with feats of ingenuity. The ſurprizing Lunardi and Blanchard may take their aërial tours through the clouds, while I ſhall content myſelf with attempting humbler, but more important improvements on the platform of the earth. The ſpeculative Farmer no ſooner conceives the hint of what he imagines will prove an eligible and promiſing method of culture, but he fancies he ſhall grow fields of golden corn, and hurries into raſh, expenſive experiments. For want of minuter attention, and from neglecting to make his firſt tryals in miniature, he miſcarries, and, ſickened with the expence and trouble, abandons all thoughts of perſeverance, and returns again to the beaten tracks of ignorance and inconſideration. In my little walk I have no incongruous ambition to excite the wonder, but a ſtrong deſire to conduce to the emolument, of my countrymen. My humble aims and wiſhes are to amuſe and inſtruct on a narrow ſcale, and by unexpenſive experiments. I flatter myſelf I ſhall be able, at a ſmall coſt, and by little trials, to give concluſive and ſatisfactory proofs of the more ſubſtantial benefits that muſt reſult from ſimilar practice in a larger way. I purpoſe to exhibit a ſmall agricultural chart, by the help of which the young adventurer

may

may be ſecured from many dangers, and heavy expences to which he is liable from precipitancy and inexperience. The method of practice which I would recommend to general attention, from a conviction and experience of their ſucceſs, I am ready, and ſhall be happy to exhibit and explain to ſuch as pleaſe to encourage me with their ſubſcriptions. For the exhibition of my little plan, I have taken 40 acres of land, and more may be had adjoining the ſame, in a pleaſant healthy ſituation, about nine miles (an eaſy breakfaſt ride from town) in the vicinity of Epping-Forreſt, with a large convenient houſe, with four parlours and nine bed chambers, and every conveniency for the accommodation and entertainment of the ſubſcribers; ſo that, if any of them ſhould be inclined to continue in the country to inſtruct themſelves in this uſeful ſtudy, they may be accommodated with every thing requiſite, and acquire, at a cheap rate, the knowledge neceſſary for launching out on a larger and more extenſive plan. The ſituation is favourable for ſhooting and other rural amuſements. The ſcheme on which I purpoſe to proceed will be illuſtrated by a variety of eaſy and ſimple experiments on ſixty-three fields of three different kinds of native ſoil. The firſt twenty-one will conſiſt of a cold, ſtiff, heavy clay. The ſecond twenty-one of a ſharp, coarſe gravel; and the third twenty-one of mere ſand; and all the ſixty-three ſo barren as not to yield corn, or other crops, worth the labour. From thoſe fields of unimproved ſoil, I propoſe making ſixty different improvements, of the particulars of which the Subſcribers will be informed. Thoſe ſixty diminitive fields are intended to be ſix feet by three, or in any other proportion that the Subſcribers may like better.

To

To evince that thoſe natural fields of inartificial ſoils will not bear ſufficient crops without manure or compoſition, I intend to ſow thoſe in their natural ſtates. The other ſixty ſhall be cultivated in ſixty different methods or degrees of culture and compoſition, from which I undertake to ſhew that preciſe degree of compoſition which is moſt profitable, and fitteſt to adhere to. The ignorance of this proper culture occaſions the great difficulty and uncertainty of raiſing good crops of corn, or graſs, &c. on unmanured land. As the richeſt cordials taken to exceſs deſtroy human life, ſo too great quantities of the richeſt manures, or compoſts, if unſkilfully applied, will, inſtead of forwarding, intirely deſtroy vegetation. There is no doubt but moſt gentlemen are furniſhed with the moſt approved writers on agriculture, but ſtill books can only inſtruct them in the ſpeculative principles of the ſcience; and after all, theory without practice, is only to the farmer, as a good foundation to a builder, who muſt ſtill provide himſelf with implements and materials to finiſh his ſuperſtructure. This little ſyſtem of practical agriculture, humble as it is, and confined as it may be thought, will nevertheleſs open a very extenſive field of uſeful knowledge to ſuch as will be at a little trouble and very moderate expence, to forward this laudable and promiſing undertaking. It is propoſed on his ſubſcription for any contribution he thinks proper, not leſs than , that each Subſcriber ſhall be freely welcome to ſee each field properly prepared, and be made fully acquainted with the manner of improvement, the quantity and various mixtures of manure and compoſts in the different fields, which will be all laid out in the ſame expoſure, all ſown at the ſame time,

and

and with the ſame ſorts and quantities of ſeeds. The different progreſs they make, and the different productions that they yield, will evidently demonſtrate what kind of treatment each field ſhould undergo, both in its primitive, and in its improved, ſtate. For further information, regular books will be kept, with all commercial exactneſs, to ſhew the real uſefulneſs of ſuch a plan, as every ſingle article of expence will be produced, and the accounts of debtor and creditor ſo minutely ſtated, as to leave no poſſibility for miſtake or deluſion. Exact calculations will be made, of the quantity and quality of the various compoſitions applied to each field, and of the ſimilar proportions required for the culture and improvement of a ſingle acre, agreeable to the different methods of culture of which experiments will be made in the ſixty different fields.

Nor will ſuch notes and obſervations be neglected as may be neceſſary to inſtruct and aſſiſt the inquiſitive, during the whole courſe of time, from the ſowing to the gathering. In like manner I mean to go through every ſeaſon of the year with reſpect to the different productions of every kind of grain, and a variety of principal crops that are commonly in uſe, and thought moſt proper and profitable in this country. I flatter myſelf, this part of my plan will be of ſingular utility to the farmer, and not unacceptable or unentertaining to my Subſcribers. Various are the methods of ploughing and ſowing, and great is the diverſity of opinions about them. On theſe points I hope to throw great light in the courſe of my experiments, and I do not deſpair of being able to reduce them to certainty and general rules. One ploughs deep, another light; one ſows in drills, another promiſcuouſly, by hand, &c. If I miſtake not, ſome time paſt a medal was offered to the perſon that ſhould give the beſt reaſon for the

depth

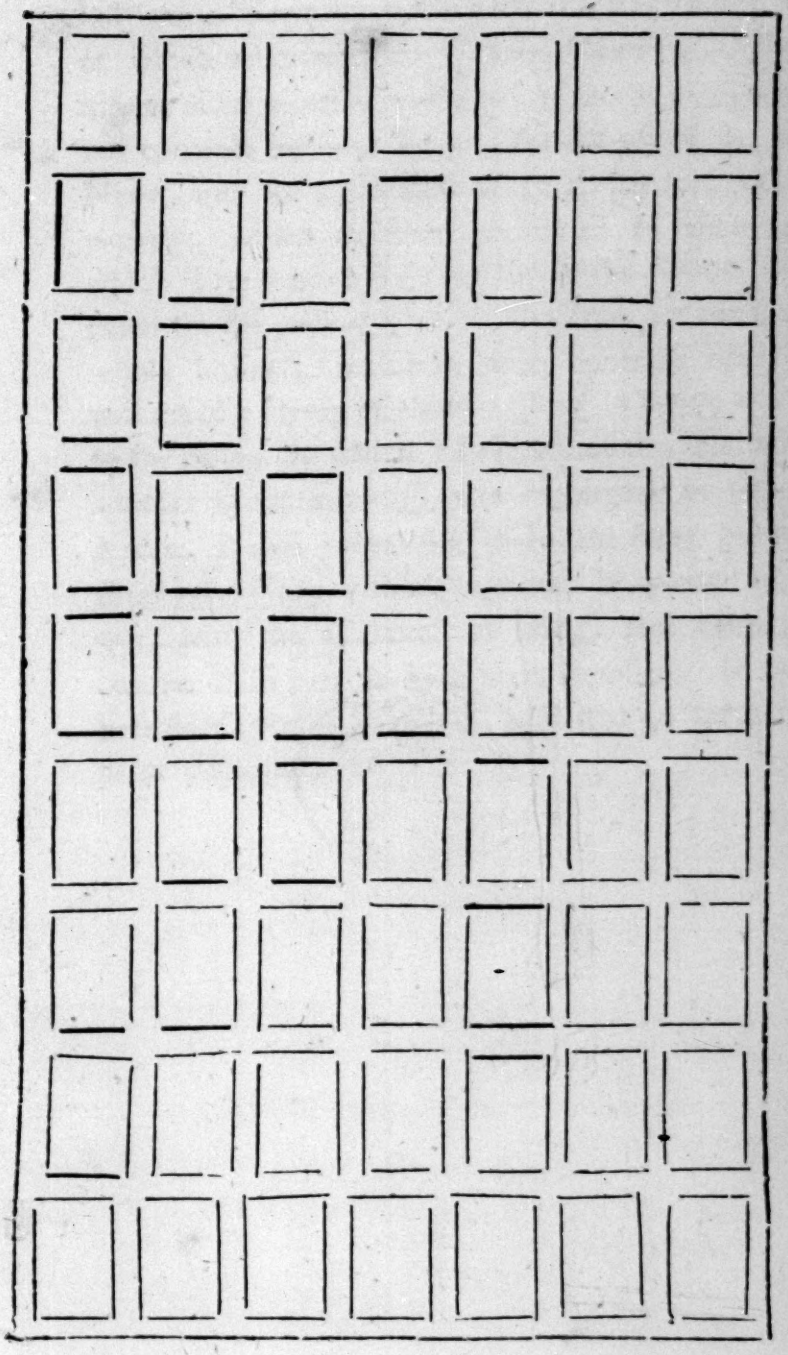
depth of ploughing This is a point which I truſt to clear up to general ſatisfaction in the progreſs of my practice. Numerous as the ſtrata of the earth are, and various as their qualities may be, at any depth to which it would quit the expence of the farmer to go, it is very eaſy to know their comparative uſefulneſs in vegetation, and their different fitneſs for the nouriſhment of every ſpecies of grain and of every plant, that is cultivated in crops for the purpoſes of uſe or ornament. I humbly preſume to point out the knowledge requiſite for this important purpoſe, in which every Gentleman may be fully informed to his entire ſatisfaction, by a little attention to a few eaſy rules, an adherence to which will ſoon undeniably ſhow the practibility and certainty of my ſcheme, for acquiring the true and proper principles of rational practical agriculture. I ſhall, therefore, confine myſelf in my experiments to ſuch depths of the earth as are within the compaſs of a moderate expence, and will pay for raiſing to improve the exhauſted ſurfaces. It is, however, no part of my plan, to make a chemical analyſis of the different kinds of earth, in order to aſcertain the quantity of ſalt, ſulphur, &c. of which they are compoſed, but I undertake by ſimpler, but ſatisfactory experiments, to ſhew which of them will produce the beſt crops of corn and vegetables, and ſhow what quantity and mixture each of them require, to make it proper aliment for the grain and vegetables that are to be nouriſhed and fed by it. I have had many years experience in the vaſt variety of ways of the uſes of common ſalt, which is an invaluable manure, but requires to be applied with judgment, and prepared and managed with ſkill. The different methods of preparation and management to compound it juſtly and properly,

properly with every different ſoil, and the manner of ſowing it, as it may ſometimes be properly ſown in the broad caſt, I purpoſe to ſhew in a courſe of experiments, the reſult of which will evince the true art of manuring with ſalt. My intention is to begin with wheat, as the principal bread corn, though it is rather late in the ſeaſon for that kind of grain. I ſhall then proceed to the firſt kind of Lent corn. I ſhall ſow one acre of beans in drills, another next to it in the common broad caſt way; in the ſame manner I intend to ſow peaſe, barley, oats, rye, and tares. It is likewiſe part of my ſcheme to ſow an acre of carrots, parſnips, and potatoes, and to plant another acre with cabbages, turnep cabbages, and turnep-rooted cabbages, all on land in equal condition and in the ſame expoſure, ſo that each diviſion will vie with another, and its production in quantity and quality will prove which of them is the beſt and moſt profitable food for the different ſorts of cattle. I ſhall alſo in the proper ſeaſon ſow an acre of turneps in drills, and another by broad caſt in the manner before mentioned, for the ſake and intent of the ſame experiment.

Having thus given the outlines of the method I intend to obſerve in the inveſtigation of the proper principles of practical agriculture, I ſhall next mention, in a conciſe and ſummary manner, that I propoſe to pay particular attention to the propagation of the different ſorts of cattle and poultry, but eſpecially to the breeding, rearing, and fattening of hogs, from which, if I do not greatly deceive myſelf, I expect to be able to point out new methods of public ſaving and utility; in the communication of which I ſhall be free and open to my Subſcribers; truſting, that if what I have to offer in this way, meet with their approba-

tion, they will countenance me with their encouragement and intereſt in the proſecution of my well-meant purpoſes. I have here only to add, that ſuch of the Subſcribers as chooſe to have, on the moſt reaſonable terms, any quantity of land they like, for the purpoſe of making their own experiments; to the furtherance of which I will undertake, in their abſence, to contribute my aſſiſtance according to their own directions, and the land is now in a ſtate of preparation and only deficient in the ſubſcription to render it fit for the reception of the different ſeeds and crops by the 30th inſtant.

AGRICULTURAL CHART.



GR
III
BRITISH MUSEUM

The following are copies of certificates of my conduct laſt war in Germany in the years 60, 61, 62, the originals of which were left with General Conway. I beg leave alſo to aſſert a well-known fact of recent date, *viz.* The laſt contract for Sour Krout, for the uſe of his Majeſty's Navy, was for 2400 tons at 12 £. per ton, excluſive of package, which together amounted to about 44000£. which I reduced to 6 £. per ton in the Krout, and equivalen tin the package, which was cent. per cent. upon the whole buſineſs, which in every contract equal to that, will make a ſaving of about 22000£. a ſaving and a ſervice to the public by which I ſuffered much; and whereas it appears about 44000£. was employed in the ſtock of Krout, I will undertake to do the ſame buſineſs, and ſupply the Navy with all that may be wanted in peace or war, with the aſſiſtance of 400£. and cent. per cent. cheaper than ever it hath been ſupplied. If in what I here ſtate there is no merit I will ſtill go further and ſurprize mankind.

Copy

Copy of a Letter.

Mr. BELL, Sir,

I Received yours of the 12th current yeſterday, with the extract of a Letter to Mr. Wier, dated 24th June, 1762, the contents of which I well remember. I moſt willingly grant you the Certificate required, and wiſh it may give any ſatisfaction to General Conway, and be of ſervice to you, as I think your conduct in that affair merits encouragement, and am, wiſhing you ſucceſs,

Sir,

Your humble Servant,

OB. BOURNE.

Copy

Copy of a Certificate.

THESE are to certify that Mr. Edward Bell, late Magazine-keeper at Bremen, did lay, and prove, before me the fraud of 50*l*. per cent in the iſſue of the Magazines, together with the ſeveral ſavings from the exchange of the money, the wages, carriage, and other expences expreſſed in his Letter to Mr. Wier, bearing date 24th June, 1762.

OB. BOURNE,

Major in the Army, and

Capt. in the King's or 8th Regt.

N. B. Saved from the exchange of the money from eight to ten per cent.—in the labour 32 per cent.—in the carriage 60 per cent.—in the iſſue of the Magazines 50 per cent.

Copy

Copy of a another Certificate.

THESE are to certify that Edward Bell was appointed magazine keeper at Bremen by Thomas Pownall, Esq. Director General of Controll, at the recommendation of Daniel Wier, Esq. one of his Majesty's principal Commissaries; in which capacity he did particularly distinguish himself by his assiduity in serving and supplying the Army according to the orders and directions given to him for that purpose, and in every thing the nature of his office would admit of, until the magazines were sold by order of Government.

DANIEL WIER,

Principal Commissary of Supplies.

N. B. Gentlemen by inquiring for Mr. Bell, at N°. ~~4~~ 9 Horse-Road ~~George-Street, Adelphi,~~ may speak with the writer of this and the proposer of the scheme, and be satisfied in every particular; or by supplying him with their respective address shall be waited on at their own houses. Subscriptions will be received as above, or by Mr. Coutts, Banker, in the Strand.